

PhD school in Biotechnology **WINTER SCHOOL ON BIOTECHNOLOGY - 2020**

“Epigenetics: living organisms and environment cross-talk”

20-23 Gennaio 2020

Aula A3 Polo Biotecnologie

Monday, January 20, 2020 Chair: **Stefano Bruscoli - Efisio Puxeddu** *Medical Epigenetics, Environment and health*

9:00 – 9:30		OPENING
9:30 – 11:00	Katrina Podsypanina	Chromatin Dynamics in Cancer: Epigenetic parameters and cellular fate
11:00 – 11:30		COFFEE BREAK
11:30 – 12:30	Oxana Bereshchenko	How hematopoietic stem cells withstand the environmental stress: role of glucocorticoid induced leucine zipper (GILZ)
12:30 – 13:30	Marianna Lucafò	Glucocorticoid pharmacoeugenetics in pediatric patients
13:30 – 14:30		LUNCH
14:30 – 15:30	Pierluigi Tenca	Tapestri Platform – Targeted Single Cells DNA Sequencing in Cancer Genomics Characterization
15:30 – 15:50	Sara Flamini	Glucocorticoid induced leucine zipper (GILZ) regulates liver fibrosis in mice
15:50 – 16:10	Viana de Barros Antonio	Role of glucocorticoid-induced leucine zipper in normal and pre-leukemic hematopoietic stem cell functions
16:10 – 16:30	Davide Sala	Novel combined gene/cell therapy strategies to provide full rescue of the Sandhoff pathological phenotype
16:30 - 16:50	Giulio Capponi	Comparison between methods for measuring mechanical properties of single adherent cells
16:50 - 17:10	Sabata Martino	“Nanomaterials” introducing a scientific journal

Tuesday, January 21, 2020 Chair: **Loredana Latterini** *Smart materials for epigenetics*

9:00 – 10:30	Iva Pashkuleva	Design of glycome-inspired bioinstructive materials
10:30 – 11:00		COFFEE BREAK
11:00 – 12:00	Maria Rosa Antognazza	Cell Stimulation by Polymer Photoexcitation (CSPP): a new tool, many open issues
12:00 – 13:00	Carla Ferreri	Fatty acid structures and lipidomics: from science innovation to health market application
13:00 – 14:30		LUNCH
14:30 – 15:30	Paolo Capelli	Technologies of cryoconservation of biological materials
15:30 – 15:50	Niki Tombolesi	Probing the biochemistry of heart and kidney tissues using Raman and FTIR micro-spectroscopic techniques
15:50– 16:10	Giulia Quaglia	New eco-friendly strategies for the synthesis of antimicrobial silver nanoparticles
16:10 – 16:30	Martina Alunni Cardinali	How Brillouin and Raman micro-spectroscopy can help to characterize bone mechanical and chemical properties
16:30 - 16:50	Gabriele Magara	Eco-friendly versus amended antifouling biocides for environmental safety
16:50 - 17:10	Alessandra Riccio	<i>In silico</i> and biophysical studies to unravel the molecular basis for PD-1/PD- L1 interaction inhibition

Wednesday, January 22, 2020 Chair: Sabata Martino *Molecular basis of epigenetics*

9:00 – 10:30	Sirio Dupont	ECM stiffness mechanotransduction: how the physical properties of the microenvironment control cell behavior
10:30 – 11:00		COFFEE BREAK
11:00 – 12:00	Lucia Catani	Myeloproliferative Neoplasms: a model of study of the molecular and microenvironmental regulation
12:00 – 13:00	Emidio Albertini	Investigating DNA methylation in plant response to developmental cues and environmental stresses
13:00 – 14:30		LUNCH

14:30 – 15:30	Francesco Morena	Integrated Computational Analysis Highlights unique miRNA Signatures in the Subventricular Zone and Striatum of GM2 Gangliosidosis Animal Models.
15:30 – 15:50	Angela Conti	Homoplasy: a possible phylogenetic signal to delimit species
15:50– 16:10	Federica Delo	Drug-induced phospholipidosis prompts the release of extracellular vesicles carrying autophagy- associated markers: new evidence of a general mechanism of secretion driven by lysosomal impairment
16:10 – 16:30	Chiara Suvieri	A cross-talk between blood-cell neuroplasticity-related genes and environmental enrichment in working dogs
16:30 - 16:50	AnairGracielaLema Fernandez	A distinct epigenetic program underlies the 1;7 translocation in myelodysplastic syndromes
16:50 - 17:10		Flash Presentations of students (I)

Thursday, January 23, 2020 Chair: Gianluigi Cardinali

9:00 – 10:30	Flavia Marcacci	Empirism, reductionism, realism: approaches for science in the epigenetic scenario
10:30 – 11:00		COFFEE BREAK
11:00 – 12:00	Duccio Cavalieri	Epigenetics and the microbiome on the gut brain axis.
12:00 – 13:00		Flash Presentations of students (II)
13:00 – 14:00		LUNCH

Open Day “Biotechnology and Society”

Thursday, January 23, 2020 ore 17:00

Sala dei Notari

Saluti e apertura lavori

Sindaco di Perugia

Magnifico Rettore Università degli Studi di Perugia **Relatori**

Duccio Cavalieri Luca Gammaitoni Flavia Marcacci Assuntina Morresi
Tomasz Trafny

Moderatore

Gianluigi Cardinali Consegna premi messi in palio da Nanomaterials e Zanichelli.